

JAN 27 1994

**TCG**

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January 27, 1994

William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Room 222  
Washington, D.C. 20554

Re: Written Ex Parte Presentation in CC Docket No. 93-162:  
Investigation of Expanded Interconnection Tariffs

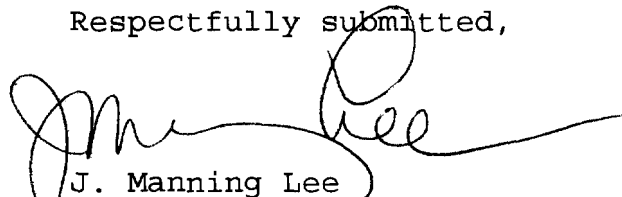
Dear Mr. Caton:

Teleport Communications Group, Inc. ("TCG") hereby submits an original and two copies of this written ex parte communication concerning the above referenced investigation. See § 1.1206 of the Commission's Rules.

Attached are sample rearrangement scenarios submitted to the Commission to provide information on the types of rearrangements which TCG expects will commonly occur with expanded interconnection arrangements.

Should there be any questions, please contact the undersigned.

Respectfully submitted,



J. Manning Lee  
Senior Regulatory Counsel

## Attachments

cc: Greg Vogt  
Amy Glatter  
Chris Frentrup  
Carol Canteen  
Mary DeLuca

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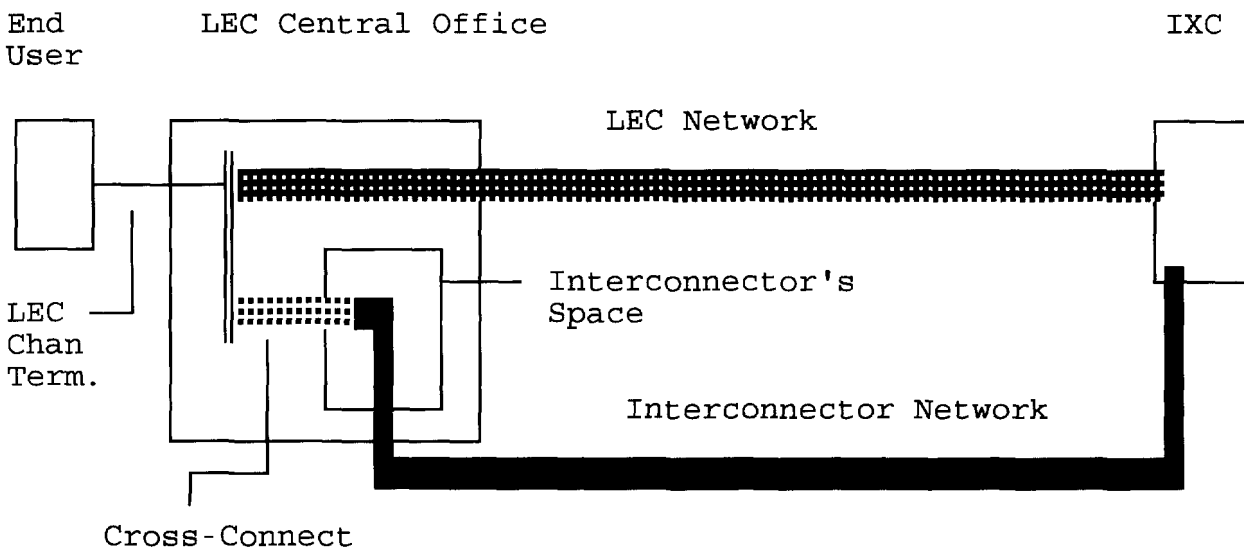
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Special Access Expanded Interconnection RearrangementsFEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

There are two basic scenarios that may occur regarding rearrangements of special access in connection with the use of interstate expanded interconnection arrangements. The first scenario is "Basic point-to-point interconnection", the second is "Complex Interconnection", with multiplexing and subtending services.

1) Basic Point-to-point Interconnection - This is the configuration that has been the subject of the FCC's information requests to the LECs. In this situation, a point-to-point circuit directly connecting an interexchange carrier (IXC) to an end user is transferred to an interconnector, with no physical change in the service connected to the end user.

Figure 1

Prior to the use of expanded interconnection, the circuit would be routed from the end user to the LEC Central Office via the LEC Channel Termination (Chan Term). From there, it would be routed to the IXC via the LEC Network, (generally consisting of interoffice mileage and another Chan Term). The entire LEC service would be billed to the IXC.

With expanded interconnection, the LEC Chan Term is rerouted from the LEC Network to the Interconnector Network via an expanded interconnection Cross-Connect to an interconnector's space. Additionally, the IXC may wish to have the interconnector become the customer of record for the LEC Chan Term for billing and service issues. The LECs were ordered by the Commission to make any non-recurring charges associated with this re-routing cost-based and non-discriminatory.

To address the issues as to whether charges proposed by the LECs are cost-based and non-discriminatory, the following cases must be examined and compared:

1) What is the cost to shift the following special access facilities from one LEC Network Facility to another within a single LEC Central Office? (i.e. to route to a separate IXC Point of Presence in a LATA). Costs should be shown on a first and additional basis if applicable.

- a) DS1
- b) DS3

Do the costs change if the billing for the facilities is changed to a different IXC?

2) What is the cost to shift the following from the LEC network to an expanded interconnection cross-connection? Costs should be shown on a first and additional basis if applicable.

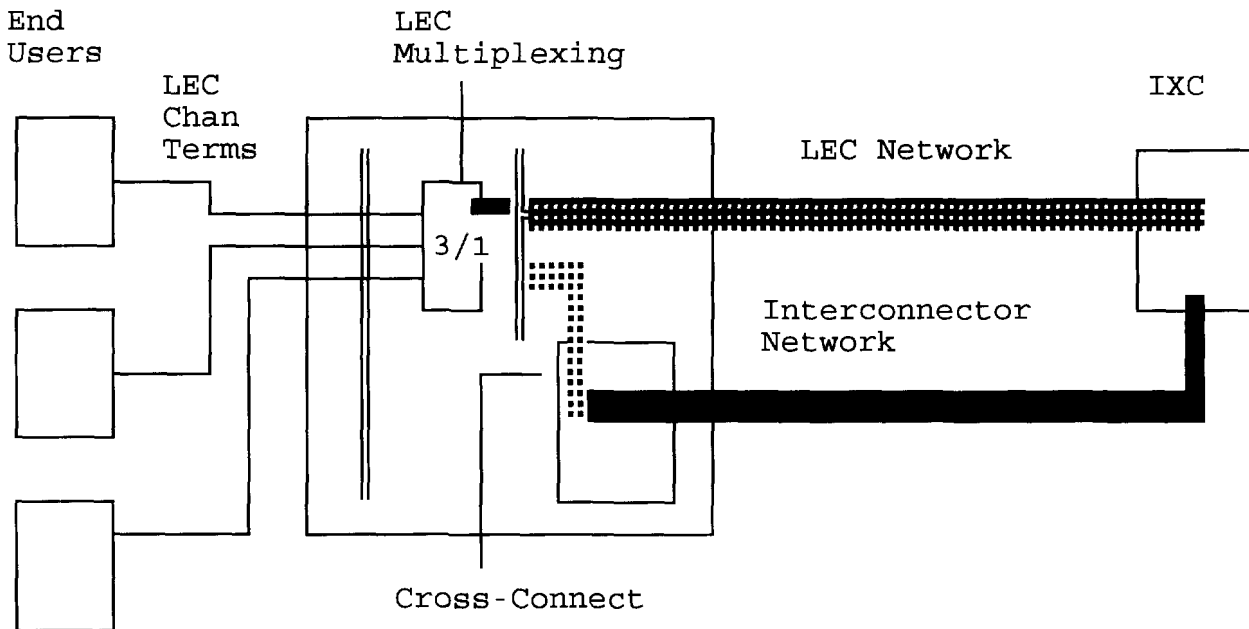
- a) DS1
- b) DS3

Does the cost change if the interconnector is made the customer of record for billing purposes for the end user Chan Term?

3) Has the LEC offered any waivers for the rearrangements as described in 1) above? If so, are similar waivers applicable for 2) above as well?

2) Complex Interconnection. This involves a service that utilizes a LEC-provided multiplexer to convert the IXC's circuit to lower bandwidth levels (i.e. DS3 to 28 DS1s, DS1 to 24 DS0s) in order to provide service to multiple end users in the LEC network.

Figure 2 - Complex Special Access Interconnection



Prior to the use of expanded interconnection in the example above, a DS1 circuit would be routed from the end user to the LEC Central Office via LEC Chan Terms, then be fed into a multiplexer, which enables 28 DS1s to be placed upon 1 DS3 facility. The DS3 is then routed over the LEC Network to the IXC.

For expanded interconnection, the DS3 is re-routed from the LEC Network to the Interconnector Network. The only physical work will be to disconnect the circuit and then perform the cross-connect to the interconnector's network (the network to the right of the multiplexer is identical to that in figure 1). The physical character of the LEC Chan. Terms and LEC multiplexing will not be changed. The Interconnector may become the customer of record instead of the interexchange carrier.

To ensure that the proper rearrangement charges apply in this scenario, the following cases must be addressed:

- 4) For the physical rerouting of the circuit from the LEC Network to the interconnector network via the Cross-Connect, would any different charges apply than those in 1). If so,

explain the cost basis for this.

5) For an IXC's circuit that is entirely on the LEC Network (expanded interconnection is not used), what charges apply to administrative changes relating to an interexchange carrier's circuits, including a) change of billing address, b) change of circuit identification, and c) change of customer of record. What are the cost differences between changing a billing address and changing a customer of record. Please provide for:

- a) 1 DS3/DS1 multiplexer with 28 subtending DS1 chan terms.
- b) 1 DS1/DS0 multiplexer with 24 subtending DS0 chan terms.
- c) 1 DS3/DS1 multiplexer, 28 DS1/DS0 multiplexers, and 672 DS0 chan terms.

6) For the LEC multiplexing and all chan terms between the multiplexing and end users, what charges, if any, would be imposed to change the customer of record from the IXC to the interconnector, assuming no physical change in the circuits and no change in circuit identification, for the following situations.

- a) 1 DS3/DS1 multiplexer with 28 subtending DS1 chan terms.
- b) 1 DS1/DS0 multiplexer with 24 subtending DS0 chan terms.
- c) 1 DS3/DS1 multiplexer, 28 DS1/DS0 multiplexers, and 672 DS0 chan terms.

What charges, if any, would apply to change the customer's billing address only?

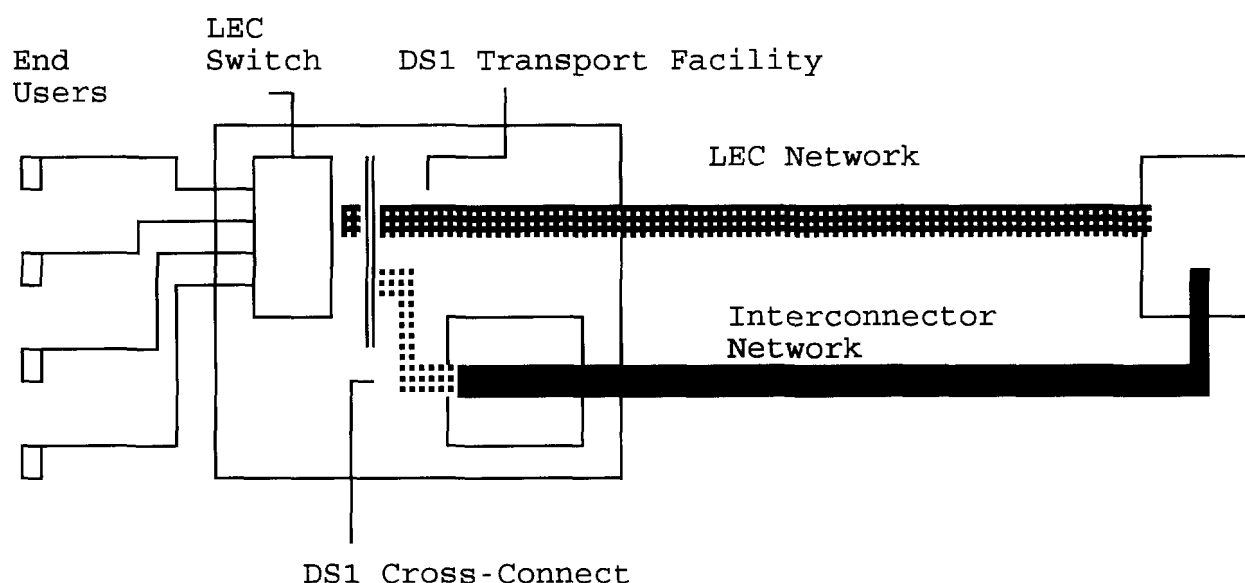
7) What charges apply to move an end user DS1 Chan Term from one LEC Multiplexer to another within a single LEC Central Office? For a DS0 Chan Term?

8) What charges apply to move an end user DS1 Chan Term from a LEC Multiplexer to an expanded interconnection cross-connect? For a DS0 Chan Term?

### Switched Access Expanded Interconnection Rearrangements

The Commission has also authorized interconnectors to provide transport of switched access via expanded interconnection. This involves providing a cross-connect to an interconnector that links a trunk from a LEC end-office or tandem switch to the interconnector's network for connection to an interexchange carrier. Cross-connects at the DS1 level can be directly routed to the LEC switch (figure 3), while cross-connects at the DS3 level require additional DS3 to DS1 multiplexing (direct switch connections at the DS3 level are not technically available).

Figure 3 - DS1 Switched Transport



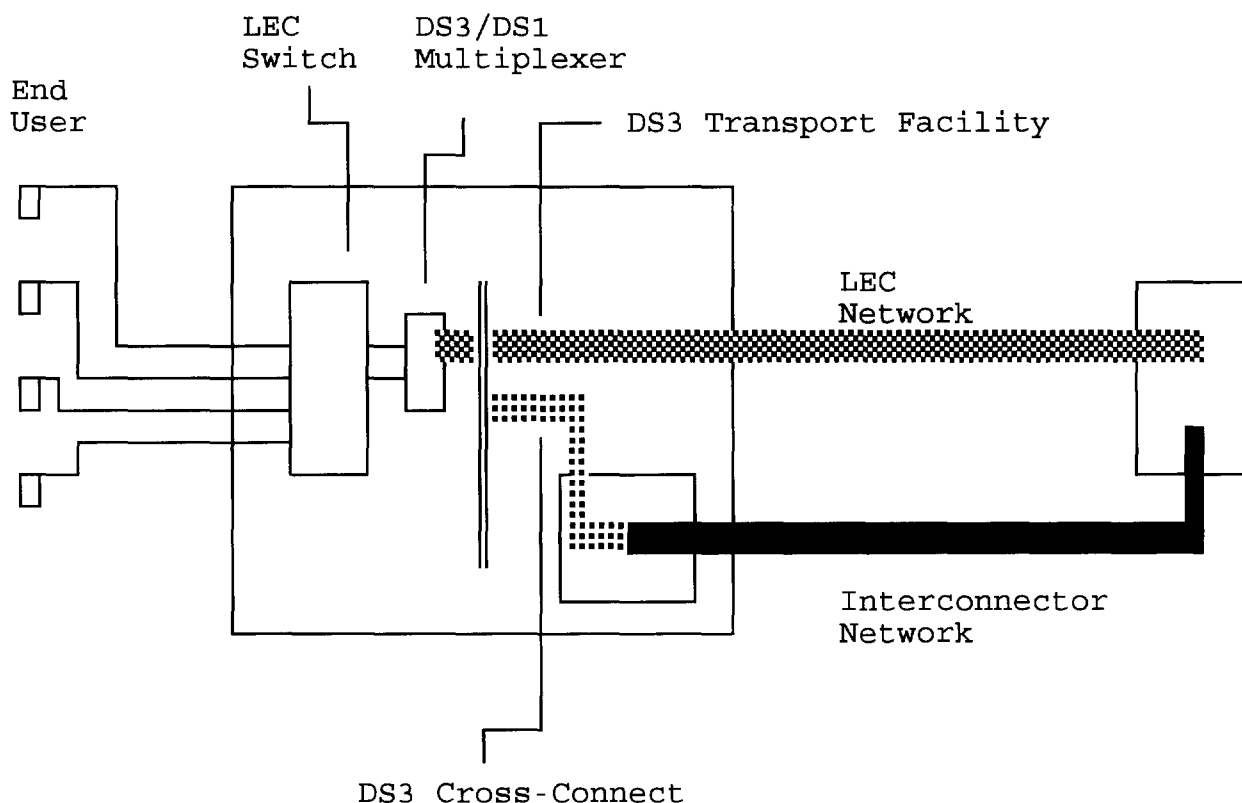
Like Expanded Interconnection for Special Access, rearrangement charges may be incurred when switched traffic routed over the LEC Network is re-routed to the interconnector's network via the Cross-Connect. The LECs were instructed to file non-discriminatory rearrangement charges in a similar manner to special access expanded interconnection.

- 9) For the physical rerouting of the circuit from the LEC Network to the Interconnector Network via the Cross-Connect, would any different charges apply to those described in 1 and 2, above? If so, explain the cost basis for this.

## 2) DS3 Switched Transport Interconnection

For DS3 Switched Transport, DS1 Trunks from the LEC Switch are routed through a DS3 to DS1 multiplexer, then placed on DS3 Transport Facilities on the LEC Network for routing to the IXC. With Expanded Interconnection, this DS3 facility would be re-routed to an interconnector's Network via a DS3 Cross-Connect. No physical change would be performed on the multiplexer or DS1 switch trunks.

Figure 4 - DS3 Switched Transport Interconnection

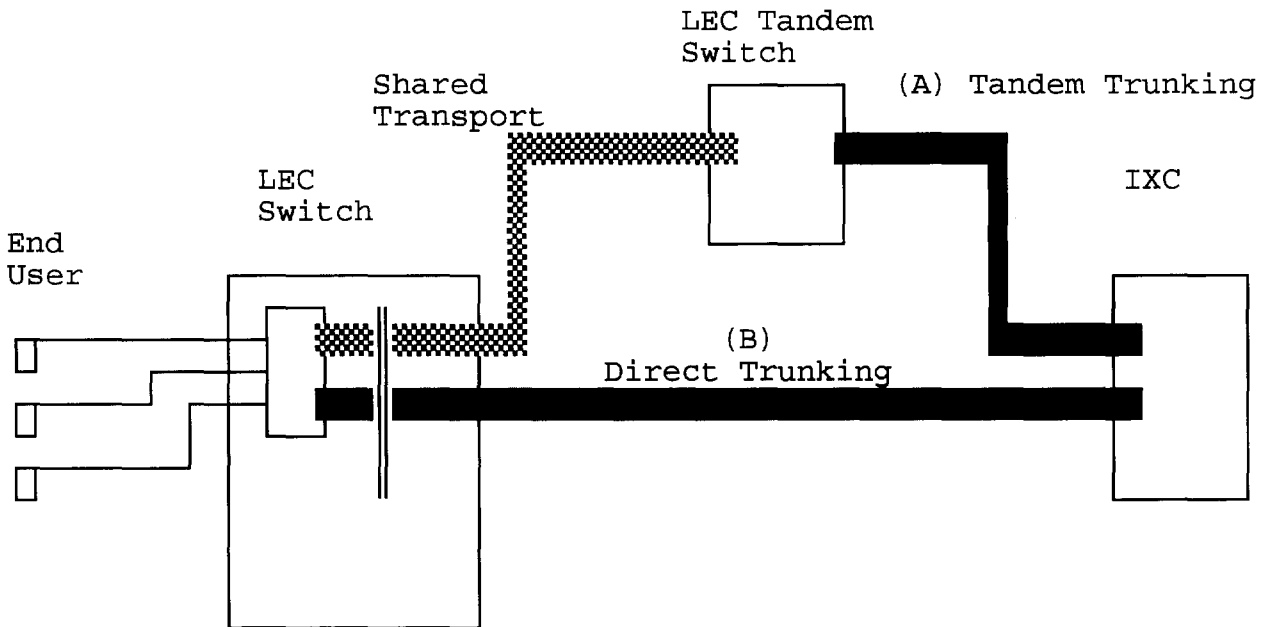


- 10) What charges, if any, apply to reconfigure a LEC multiplexer to include switched trunks?
- 11) What charges, if any, apply to perform administrative changes including: a) change in billing address, b) change in circuit identification number, or c) change in customer of record, upon the LEC multiplexer?
- 12) What charges, if any, would apply for an interconnector to reconfigure the multiplexer (i.e. move a DS0 or DS1 from one port or another)?

### 3) Local Transport Restructuring

As part of the Local Transport Restructuring order, the LECs were required to waive, until May 1, 1994, certain non-recurring charges imposed upon interexchange carriers associated with reconfiguring their networks. Waivers apply when an interexchange carrier converts its trunking either from tandem switched to direct end-office trunked, or vice versa.

Figure 5 - Local Transport Restructuring



As part of the local transport restructuring, interexchange carriers can disconnect their tandem trunking (A), and instead install direct trunking (B), or vice versa.

- 13 - a) What charges would apply to re-route a DS1 Tandem Trunked Facility to an end office DS1 Direct Trunked Facility on the LEC's Network assuming waivers do not apply?
- 13 - b) What charges apply for rerouting a DS1 Tandem Trunked Facility to an end office DS3 Direct Trunked Facility assuming waivers do not apply?
- 13 - c) What charges apply for rerouting a DS3 Tandem Trunked Facility to an end office DS3 Direct Trunked Facility assuming waivers do not apply?
- 13 - d) For a) through c) above, under what situations do waivers apply?



14) Repeat 13 - a) through 13 - d), in each case re-routing the Tandem Trunked Facility to an end office Cross-Connect, using the Interconnector's Network to provide the DS1 or DS3 Direct Trunked Facility. Explain any differences in charges, and, if applicable, why waivers are not applied evenly between the two situations.